

CLAIMS

1. A method of operating a communications system comprising
a packet-switched network, a circuit-switched network, a plurality of
5 gateways connecting the circuit-switched network to the packet-switched
network, the method comprising;
a) receiving packet traffic at one of the gateways;
b) establishing in the circuit-switched network a circuit from the gateway
to a node on the circuit-switched network; and
10 c) outputting the said packet traffic from the gateway onto the circuit;
characterised by
d) outputting from a plurality of gateways polling messages addressed to
the destination address of the packet traffic;
e) receiving at the gateways replies from the destination address;
15 f) determining the respective delays for the replies at the different
respective gateways;
g) selecting one of the gateways depending on the respective delay times;
h) establishing the virtual circuit to the gateway selected in step (g).
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2. A method according to claim 1, in which the circuit-switched network includes
a plurality of independently controlled networks and different ones of the plurality
of gateways are connected to different respective ones of the plurality of
25 networks.
3. A method according to claim 1 or 2, in which one or more of the gateways
communicate a respective delay time to a control node and the step of selecting
one of the gateways is carried out by the control node.
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4. A method according to claim 3, in which only the or each gateway having a
respective delay value less than a threshold value communicates the delay value to
the control node.

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5. A method according to any one of the preceding claims in which the packets are Internet Protocol (IP) packets.

6. A method according to any one of the preceding claims in which the circuit-switched network is an ATM (asynchronous transfer mode) network.

7. A control node for use in a method according to any one of the preceding claims, the control node including a control processor and a signalling interface, which signalling interface, in use, communicates signals with a plurality of gateways in a circuit-switched network, the control processor being arranged to carry out the following steps in sequence:

- a) communicating instructions to the plurality of gateways to transmit polling messages to a destination address in a circuit-switched network connected to the gateways;
- b) receiving from the plurality of gateways indications of respective delays in responses to the polling messages;
- c) selecting, depending on the respective delays, one of the gateways as the end-point of a virtual circuit.

8. A gateway for use in a method according to any one of the preceding claims, the gateway including a first interface for connection to a packet-switched network, a second interface for connection to a circuit-switched network, and a control processor including a control interface arranged to communicate control signals with a control node, the control processor being arranged to carry out the following steps in sequence:

- a) in response to a control message from the control node transmitting a polling message to a destination address in the circuit-switched network;
- b) receiving a reply from the destination address and determining the delay of the reply;
- c) communicating the reply to the control node.

9. A communications network including a control node according to claim 7 and a gateway according to claim 8.

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